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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,250	09/24/2003	Jun Enomoto	Q77386	4300

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EXAMINER	
COUSO, YON JUNG	
ART UNIT	**PAPER NUMBER**
2624	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/668,250	ENOMOTO, JUN	
	Examiner	Art Unit	
	Yon Couso	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/24/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5, 10, and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 5, 10, and 15 are drawn to descriptive material NOT claimed as residing on a computer readable medium. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized.

Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality

to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b). When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a).

In contrast, a claimed computer-readable medium encoded with data structure defines structural interrelationships between the data structure and the computer software and hardware components which permits the data structure 's functionality to be realized, and is thus statutory (MPEP 2106.IV.B.1(a)).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by White et al (US Patent No. 7,035,462).

As to claim 1, White teaches an image retouching method comprising: a detecting step of detecting a local defect in an original image and distinguishing the type of the defect on the basis of image data representing the original image (column 5, line 64-column 6, line 4); a displaying step of displaying the defect detected at the detecting step with a mark corresponding to the type of the defect and receiving a correction to an inaccuracy in the detection of the defect displayed (column 6, lines 34-37); and a retouching step of retouching the image data representing the original image according to the type of the defect of which any detection inaccuracy is corrected (column 6, lines 5-25).

As to claim 2, White teaches that the detecting step detects a defect in a facial part in the original image (column 5, line 64-column 6, line 1).

As to claim 3, White teaches that the detecting step detects a defect in an eye in the original image (column 5, line 64-column 6, line 1).

As to claim 4, White teaches an image retouching apparatus comprising: a detecting section that detects a local defect in an original image and distinguishes the type of the defect on the basis of image data representing the original image (column 5, line 64-column 6, line 4); a display section that displays the defect detected at the detecting step with a mark corresponding to the type of the defect and receives a correction to an in accuracy in the detection of the defect displayed (column 6, lines 34-37); and a retouching section that retouches the image data representing the original

image according to the type of the defect of which any detection inaccuracy is corrected (column 6, lines 5-25).

As to claim 5, White teaches an image retouching program storage medium storing an image retouching program comprising: a detecting section that detects a local defect in an original image and distinguishes the type of the defect on the basis of image data representing the original image (column 5, line 64-column 6, line 4); a display section that displays the defect detected at the detecting step with a mark corresponding to the type of the defect and receives a correction to an in accuracy in the detection of the defect displayed (column 6, lines 34-37); and a retouching section that retouches the image data representing the original image according to the type of the defect of which any detection inaccuracy is corrected (column 6, lines 5-25).

As to claim 6, White teaches an image correcting method for detecting and correcting a particular defect in an eye in an image on the basis of image data representing the image, comprising: a preprocessing step of narrowing down at least one of a set of images represented by the image data and a set of regions in one of the images to obtain an image or a region that meets a predetermined condition indicating a possible presence of a defect (US Patent No 5,748,764, Benati et al, which is incorporated by reference at column 6, lines 5-14 teaches at column 3, lines 49-55 and figure 3); and a correcting step of detecting and correcting the defect in the image or region obtained at the preprocessing step on the basis of the image (Benati et al at column 3, lines 55-62 and figure 4).

As to claim 7, White teaches that the image data representing a photograph has shooting information obtained during shooting and attached to the image data; and the preprocessing step performs preprocessing according to the shooting information attached to the image data (flash information at column 5, line 64-column 6, line 1).

As to claim 8, Benatai teaches that the preprocessing step performs preprocessing on the basis of scene analysis of the image represented by the image data (column 5, lines 27-36).

As to claim 9, White teaches an image correcting apparatus for detecting and correcting a particular defect in an eye in an image on the basis of image data representing the image, comprising: a preprocessing section that narrows down at least one of a set of images represented by the image data and a set of regions in one of the images to obtain an image or a region that meets a predetermined condition indicating a possible presence of a defect (US Patent No 5,748,764, Benati et al, which is incorporated by reference at column 6, lines 5-14 teaches at column 3, lines 49-55 and figure 3); and a correcting section that detects and corrects the defect in the image or region obtained at the preprocessing step on the basis of the image (Benati et al at column 3, lines 55-62 and figure 4).

As to claim 10, White teaches an image correcting program storage medium storing an image correcting program for detecting and correcting a particular defect in an eye in an image on the basis of image data representing the image, the program comprising: a preprocessing section that narrows down at least one of a set of images represented by the image data and a set of regions in one of the images to obtain an

image or a region that meets a predetermined condition indicating a possible presence of a defect (US Patent No 5,748,764, Benati et al, which is incorporated by reference at column 6, lines 5-14 teaches at column 3, lines 49-55 and figure 3); and a correcting section that detects and corrects the defect in the image or region obtained at the preprocessing step on the basis of the image (Benati et al at column 3, lines 55-62 and figure 4).

As to claim 11, White teaches an eye detecting and correcting method for detecting an eye in an image on the basis of image data representing the image and, if the eye contains a defect of a predetermined type, correcting the defect, comprising: a detecting step of detecting an eye in the image and the appearance of the eye on the basis of the image data (column 5, line 64-column 6, line 4); and a correcting step of correcting, if a plurality of eyes are detected at the detecting step and any of the plurality of eyes contains the defect, the eye containing the defect with reference to the appearance of the other eyes (column 5, line 64-column 6, line 4 and column 9, line 46-column 10, line 55).

As to claim 12, White teaches that the correcting step corrects the eye with reference to the appearance of the eye pairing up with the eye containing the defect column 9, line 46-column 10, line 55).

As to claim 13, White teaches that the correcting step corrects the eye with reference to the appearance of the eyes of a person other than the person with the eye containing the defect (column 9, lines 19-22).

As to claim 14, White teaches an eye detecting and correcting apparatus for detecting an eye in an image on the basis of image data representing the image and, if the eye contains a defect of a predetermined type, correcting the defect, comprising: a detecting section that detects an eye in the image and the appearance of the eye on the basis of the image data (column 5, line 64-column 6, line 4); and a correcting section that, if a plurality of eyes are detected at the detecting step and any of the plurality of eyes contains the defect, corrects the eye containing the defect with reference to the appearance of the other eyes (column 5, line 64-column 6, line 4 and column 9, line 46-column 10, line 55).

As to claim 15, White teaches an eye detecting and correcting program storage medium storing an eye detecting and correcting program for detecting an eye in an image on the basis of image data representing the image and, if the eye contains a defect of a predetermined type, correcting the defect, the program comprising: a detecting section that detects an eye in the image and the appearance of the eye on the basis of the image data (column 5, line 64-column 6, line 4); and a correcting section that, if a plurality of eyes are detected at the detecting step and any of the plurality of eyes contains the defect, corrects the eye containing the defect with reference to the appearance of the other eyes (column 5, line 64-column 6, line 4 and column 9, line 46-column 10, line 55).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Luo, Luo et al, Enomoto, Fuersich et al, Nesterov et al, Held et al, and Steinberg are also cited.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis, can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

YON J. COUSO
PRIMARY EXAMINER

January 11, 2007